

¹ R. Kent Parsons is the Television Translator Coordinator for the State of Utah and represents the coordination of the documented 600 TV translators in the State (approx. one tenth of the nations TV translator stations'). For the past two and a half years, with authority from the FCC, he has been performing both analog and digital TV testing for the purpose of discovering new methods of spectrum management in order to provide channels for the rural viewers in this nation and to include them in the transition to the new digital world. He also has been engineering, installing and maintaining Translator stations, throughout the State of Utah, for the past 46 years. He was a full time employee of the University of Utah for 38 years and retired from the U of U on May 31, 2003.

- Even if all existing unused TV channels were used for companion digital channels, it still does not leave enough spectrum for every translator station.
- This NPRM only refers to “authorized” stations and does not address the urgent need for any additional application windows for us to file for companion channels.
- No protection for high mountain-top receive signals for the translator stations are addressed.
- The FCC data-base is certainly not correct.
- To attempt to “Flash-cut” an existing analog channel to digital operation will be catastrophic and result in many translator stations going dark.
- The National translator Association has made repeated attempts, during the past 12 years, to gain authorized permission to operate very low power TV translators for the purpose of serving additional local broadcast TV stations to truly rural communities; simpler FCC application forms have also been requested. These requests are still at the FCC and have never been officially acted upon. And now this NPRM would allow unlicensed operation on these very channels.
- Many viewers simply cannot afford subscription television and depend on some type of Free-Over-the-Air reception!
- How do we track this kind of unlicensed transmission interference if it is received in any of our TV receive signals; if it occurs either at the homes or at the mountain tops?
- ARE WE TO THE POINT WHERE RURAL TELEVISION VIEWERS
WILL EITHER PAY OR GO WITHOUT TELEVISION RECEPTION?
IS THIS DISCRIMINATION?

From 1955 to 1979, TV translator applicants could file “at will” for new translator stations. In 1980 the FCC announced an NPRM to create a new service to enhance the existing translator service. This new service would be called Low Power Television and was intended to originate local programming for small rural communities. The new rules were included with the translator service and adopted in 1982 and a new filing window was then opened. Consequently, entrepreneurs and speculators filed thousands of applications. This completely overwhelmed the commission process and all future filing applications were frozen. Rural communities had to wait until the Commission could process the backlog of existing applications. In 1987, the Commission adopted a new method of filing for translators, low power stations and modification to existing stations. This was to be accomplished during a five-day filing window and limited each applicant to a maximum of five applications. Underserved rural communities, which lacked the

economic means of hiring communications consultants or lawyers, now had to compete with the entrepreneurs and speculators for spectrum.

The results of this massive filing window again produced thousands of applications and as a consequence, additional future applications were again frozen. After two more years of waiting, another five-day window was opened in 1989, resulting in yet another landslide of applications. A third five-day window was opened in 1991 and a fourth window in 1992. The Commission accepted the fifth window for new and modification applications in 1994. In 1996, the Commission opened a five-day window accepting modification of **existing** Translator and LPTV stations only, with no opportunity to file for new stations. Four more long years passed before another window would allow filing for new translator stations. **August 2000** saw the last window for filing new or modification for translators; over 4700 applications were received in this window, **as of this date many of these applications still have not been processed.**

The inescapable conclusion is: Only six opportunities, for filing new TV Translator stations to serve rural communities, is all that has been allowed during the past 24 years and services to Rural America has been greatly curtailed!

The FCC has accepted public comments for FCC document RM-10666, which requests the Commission to establish a Rural Translator Service. The Commission has completed both the Public Comment Period and the Reply Comment Period for this National Translator Association request. I also understand that out of 46 public responses, only two were actually negative. The acceptance of RM-10666 would exempt translator applicants from auction and allow them to file for new stations including digital on a daily basis, which is absolutely necessary if rural viewers are to maintain their service during the digital conversion.

I have been informed that no further FCC action is underway

Therefore, these comments will only address the urgent needs of the Truly Rural Communities who do not receive direct television reception from local full power primary stations. Consequently, they depend on television translator stations for network programming, local news, weather and emergency information.

To protect the interests of local reception to the hinterlands of this country, unlicensed operation of other signals on the television channels **must not be allowed until all TV needs of the rural communities are met.** Rural viewers deserve the full compliment of the 8VSB technology, which includes High Definition, Multi-programming and Ancillary Data Services.

It has become increasingly more difficult for local translator groups to file applications, in competition with huge distant applicants, while the spectrum continually shrinks. Establishing rules for translator stations must promote universal service but also must limit speculative applications. The FCC has yet to post an NPRM for this service.

To expedite authorization of service, an LPTV and translator applicant should be permitted to convert to digital on their *existing* analog channel by applying for a minor change with a translator output power reduction of 6 dB. i.e.; 100-Watt (peak) analog translator reduced to 25 Watts (average) digital power output. **This could be accomplished by licensing on a first come-first serve basis while certifying there will be no interference to any other service.**

The following approximate licensed TV translator station examples were derived from a 1998 fact book and do not include LPTV stations operating as translators.

Colorado.....	620
Utah	600
Alaska.....	561
Arizona.....	276
California....	454
Oregon.....	406
Montana.....	357
Nevada.....	315
New Mexico..	291
Texas.....	277
Minnesota....	276
Washington...	253
Idaho.....	244
Wyoming.....	182
Total	5112

As one can see, TV translators are mostly located in the western part of the United States and Alaska.

Also these TV translator stations directly contribute to the primary station's economic value. For one example: The present Salt Lake City Market is 36 and without the translators it slides to 43.

While the commission's records show 36 LPTV stations in Utah, in reality, only 9 originate local programming with the remaining ones operating as translators.

Because of the complexity of this new technology, it is imperative that translator technicians begin to learn and familiarize their-self with digital transmission.

I urge the commission to find a way to create additional methods to allow rural communities to proceed and become partners in the digital transition. Translator licensees need to begin transmitting digital signals if they are to compete with other digital television signals presently available through satellite and cable head-ends. Rural areas need to begin this transition as quickly as possible. This will set the pace for translators to begin the transition.

Rural communities cannot compete in an auction, as the highest bidder always wins! An average window consumes nearly four years and under the present rules the last winning applicant does not have to construct the station for another three years. In some cases the station is never built and the channel has been tied up for seven years.

I believe that serious applicants for rural translator service will build that construction permit within one year.

Our actual FCC authorized DTV translator field tests have proven that optimum channel allocation is critical during the DTV transition, especially in the rural areas where most of the translators exist. Spectrum efficiency can be achieved through careful selection of transmission parameters such as ERP, HAAT, adjacent channel (splatter) emission masks, antenna patterns (azimuthal and elevation), and antenna beam tilts. Multiple DTV translators operating at low radiated powers (e.g. < 100 watts, ERP) with either the simple or stringent emission mask (depending upon the existence of a first adjacent channel neighbor) can carefully direct its signal from mountain-top transmission sites to multiple communities in valleys, avoiding interference to each other and existing analog services. This situation can be further facilitated by techniques such as co-siting multiple translators, sharing common broadband antennas (or pairs of matched broadband antennas, each carrying even or odd channels similar to MMDS systems, and carefully choosing radiated power ratios. In doing so, many of the previously defined analog taboo TV channels may be used during and after the transition, better utilizing precious television spectrum.

Further spectrum savings can be achieved through efficient use of microwave channels (e.g. 7, 11 and 13 GHz), where up to four 6-MHz VSB signals can be reliably placed in a 25 MHz bandwidth. These “microwave backbones”, which have also been thoroughly field tested, can efficiently get DTV signals out of spectrally congested urban areas to remote translator sites where they can be transcoded (restored to pristine condition in digital regenerators) and then converted to terrestrial signals (VHF or UHF) for transmission to rural communities or subsequent translators.

Our tests have been conclusive; we can find many channels for digital conversion if these new translators reduce output power by at least 6 dB below their existing analog authorizations. A high priority should be placed on facilitating the digital transition of the existing translator service and I agree that this would maximize opportunities for viewers, stimulate DTV set penetration, and also minimize the loss of existing analog program services.

I appreciate the commission’s efforts to help with the displacement of translators in both moving authorizations to the core and also by actual or potential interference conflicts. Even though the last window was tailored for rural service, many entrepreneurs found ways to make “end runs” and some 4700 applications were received in that window of July 2000. Translators need a “Rolling One-Day Window” to supply additional television service to rural communities.

Because the full compliment of local analog stations have never adequately provided enough local and network programming for rural communities, opportunities should continue to allow this analog service to be included in the rolling one-day window.

However, our greatest interest should be directed toward 8-VSB digital service for the rural viewers.

Many translator licensees are now confused as to what direction they should be planning for the future, analog or digital. Most are uneasy in trying to compete with analog signals when home satellite and cable head-ends are now being provided with digital feeds. Digital Translators can now provide full 8VSB television signals and can easily compete with these other services. There is little doubt that High Definition Television, multi-channel programming and ancillary data information will be the future for the television service.

End viewers will make that ultimate decision.

It is ironic that authorization can now be acquired to transport the 8VSB signal statewide, via microwave and other means, and authorization cannot be gained to transmit this signal the last mile to the communities.

It will be impossible for all translator stations to convert to digital operation by the end of 2006 unless we can begin now!

Many translator licensees are ready to begin to make the transition to digital, both to change an analog translator to digital and also to find a second channel for their existing companion analog allocation. It is of considerable difference to change large systems of translators to digital operation compared to changing just one or two individual stations.

Having been unanimously nominated by the 15 members of the board of directors to the position of Vice President of the National Translator Association for the past 25 years, I must make it clear; this document is my personal views. However these statements also represents the viewpoints of a multitude of the members of this association.

Respectfully Submitted,

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August 27, 2004